



## **We are seeking a Sr. Embedded Software Engineer**

**Must have an outstanding work ethic, be self-motivated and have a “can do, get it done” teamwork/positive attitude! Competitive wages and benefits! Great team! Great culture and benefits! Employer Matched 401 k! Sick and Vacation! Health benefits!** (*Vision, dental, medical, disability, life insurance, educational assistance, career pathways, tuition reimbursement, apprenticeships, wellness programs and much more*)

**About the Company:** *Founded in 1982, Lighthouse Worldwide Solutions is the world’s leading supplier of real time contamination monitoring systems and airborne particle counters. Lighthouse offers the most complete line of contamination monitoring solutions available that include Airborne Particle Counters, Microbial Samplers, and Liquid Particle Counters, as well as Temperature / Humidity sensors. Recently added production of air purification products, manufacturing of personal protective equipment. These solutions are now found in semiconductor, pharmaceutical, data storage, biotechnology, aerospace, and defense industry plants worldwide.*

### **Job Summary:**

This position is responsible for applying knowledge of engineering principles to design, develop and test all aspects of embedded electrical systems with associated firmware. Will use computer-assisted engineering design software and equipment to perform assignments. Applies principles and techniques of embedded electrical engineering to accomplish goals. May be involved with activities of fabrication, operation, application, installation, and repair of electrical or electromechanical products and systems with associated firmware. Can work independently to accomplish project design requirements. A wide degree of creativity and latitude is expected. Leads and directs the work of others. Self-motivated, can work independently.

### **Essential duties and responsibilities:**

- Follow all safety rules and regulations, all work must be done thinking “Safety First”.
- Design, develop, and test high quality embedded software.
- Board bring-up with initial test firmware to test all circuits.
- Design and develop around MCUs and ARM microcontrollers/processors in a Linux environment.
- Conducts fabrication and testing of prototype systems, and documents design modifications as required.
- Collaborate with multi-disciplinary engineering and QA teams to design and develop new firmware and software architectures.
- Uses engineering methodology and procedures to apply principles to design and develop projects per company SOP.
- Good communication skills.
- Prolonged periods of sitting at a desk and working on a computer.
- Ability to work with and as a Team.
- Able to lift up to 40 pounds and 41+ pounds as a two-person lift.
- The above listing represents the general duties considered essential functions of the job and is not to be considered a detailed description of all the work requirements that may be inherent in the position.

**CANDIDATES SUBJECT TO PRE-EMPLOYMENT BACKGROUND SCREENING**

**Supervisory Responsibilities:** None.

**Travel:** Travel may be required on occasion to other LWS offices.

**Required Skills/Abilities:**

- Experience with Javascript/Typescript in a full-stack web development framework (i.e., MEAN stack)
- Strong understanding of computer networking technologies; TCP/IP, web sockets, and security schemes (SSL/TLS).
- Experience with WiFi and Bluetooth for IoT applications
- 2+ years of development experience with Embedded Linux: kernel space and user space
- Held a position of lead developer on a firmware/software project that has been tested and approved for production release.
- Experience using version control tools (e.g., Git) and bug tracking systems.
- Outstanding problem-solving resolution and attention to detail, willing to lead by example.
- Strong verbal and written communication skills
- Outstanding work ethic, organizational and multi-tasking skills
- Takes initiative and works well both in groups and independently.
- Excellent verbal and written communication skills.
- Strong interpersonal and customer service skills.
- Proficient in Microsoft Office Suite, related software and computers.
- Excellent organizational skills and attention to detail.
- Ability to effectively present information and respond to questions from peers, managers, and personnel from various departments.
- Ability to gather and analyze information skillfully, identifying and resolving problems in a timely manner.
- Ability to work independently and in a team environment.

**Preferred Skills and Abilities**

- Strong knowledge of C/C++ in embedded applications
- Experience with multi-threaded software design and RTOS principles
- Experience with both analog and digital sensors
- Experience with closed-loop control systems (e.g., PID)
- Experience with Microchip MCU (16-bit) and ARM (32-bit) microcontrollers
- Ability to read, understand, and modify board schematics and system diagrams.
- Proficient with hardware debugging using multimeters, oscilloscopes, and logic analyzers.

**Education and Experience:**

- B.S. in Computer Science or Electrical/Computer Engineering and 7-9+ years of experience in a related field; or equivalent.

**EEO Statement:** *Lighthouse Worldwide Solutions is an Equal Opportunity Employer. All qualified applicants will be considered for employment without regard to race, age, color, sex, religion, national origin, marital status, ancestry, citizenship, veteran status, sexual orientation or preference, gender identity, disability status, or any other legally-protected status.*

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